

Work Order ID 83609 - 2

8.3609

Page 1

April-20-12 1:24:16 PM

Item ID: D3687-1

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: MOUNT

Start Date: 20/04/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/20

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3687

Rev C

100

0.00

100

Outsource1

Outsource process - Heat Treat

Memo

Send M174B3937X4750 For heat treating
to CONDITION H-900(to become M174PHH900B3937X4750)
FTU IN EXCESS OF 190 KSI
FTU IN EXCESS OF 170 KSI

CERTIFICATE IS REQUIRED

105

0.00

105

Outsource5

Outsource process - Machining

Memo

Issue P/O: 14829
Machine as per Dwg D3687
Possible Supplier: Globus Precision
Conformity sheet required

1 12-04-25

Pto →

NCR: ☒ Yes / ☐ No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: *Arch*

Date: 13/12/11

QA Closed: *Arch*

Date: 13/12/16

Work Order: <u>83609</u>	DISPOSITION Rework <input checked="" type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. <u>03687-1</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>13-3327</u>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input checked="" type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data				<i>Focus of inspection that QH (E) was the 0623+001-002 out of tol. 0625-0626 P.C. was not marked correctly at Archer Supply</i>	<i>S Blum</i>	<i>inform supplier of issue and find out what happens. Attach Email conversation of return to suppl for reward.</i> <i>one sent 20/3/12/16</i>	<i>S Blum</i> <i>DAS 27 9-89</i> <i>13/11/27</i>	<i>DAS 27 9-89</i> <i>13/11/27</i>	<i>S Blum</i>
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	PO 16829 <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
---	---	--	--	---

Work Order ID 83609

April-20-12 1:24:16 PM

8.3609

Page 2

Item ID: D3687-1

Revision ID:

Item Name: MOUNT

Start Date: 20/04/2012 Start Qty: 8.00

Required Date: 04/05/2012 Req'd Qty: 8.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

110
Packaging
Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Memo

0.00

Ensure certificate of conformity is attached

120

120
QC
Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

INSPECT HOLE ALIGNMENT USING DT9707 JIG

DAS
27
9-89

13/11/21

124

124
Purchasing
Purchasing

0.00

Memo

0.00

Issue P/O FOR LIQUID PENETRATION
P/O #: 22148

Certificate of conformity is required

12/5/21

13/11/22

Work Order ID 83609

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83609

Page 3

Item ID: D3687-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: MOUNT

Stop *NS2*

Start Date: 20/04/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

125

Receive & Inspect for Damage & Mat'l Certs

0.00

125

Packaging

Memo

0.00

Packaging

ENSURE NDT RESULT IS ATTACH

P-13/4/22 (1)

126

QC5- Inspect part completeness to step on W/O

0.00

126

QC

Memo

0.00

Quality Control

DAS
27
9-89

13/11/27

1

127

QC6- Inspect dimensions to drawing

0.00

127

QC

Memo

0.00

Quality Control

DIMENSIONAL CHECK,
ENSURE THAT BOLT HOLES ARE CORRECT SIZE

DAS
27
9-89

13/11/27

1

Work Order ID 83609

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83609

Page 4

Item ID: D3687-1

Revision ID:

Item Name: MOUNT

Start Date: 20/04/2012 Start Qty: 8.00

Required Date: 04/05/2012 Req'd Qty: 8.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Identify as per dwg & Stock Location: GA

0.00

130

Packaging

Memo

0.00

Packaging

1X

DAS
28
9-89

13-11-27

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

DJ/Bm 13/12/04

U 13.12.04

Picklist Print

April-20-12 1:24:20 PM

Page 1

Work Order ID: 83609

83609

Parent Item: D3687-1

D3687-1

Parent Item Name: MOUNT

Start Date: 20/04/2012

Required Date: 04/05/2012

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP Rev:A New Issue 08-01-15 JLM Verified By:EC
 IPP Rev:B Added Contion H-900 JLM Verified By:DD IPP REV
 C: ADDED QC6 10.09.09 JLM VERIFIED BY DD
 IPP REV D:ADDED DT9707 INSPECTION JIG 11-01-05 JLM VERIFIED
 BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH- H900B3.937X4.750		Purchased	No			100	f	4.8700	0.33333	2.66664			
** M174PH-H900B3 937X4 750*													
17-4SS Bar H900-3.937x4.750													

Location

Loc Qty

Loc Code

MAT005

4.87

112374

4.87

105

Each

0.0000

1

8

D3687-1P

Purchased

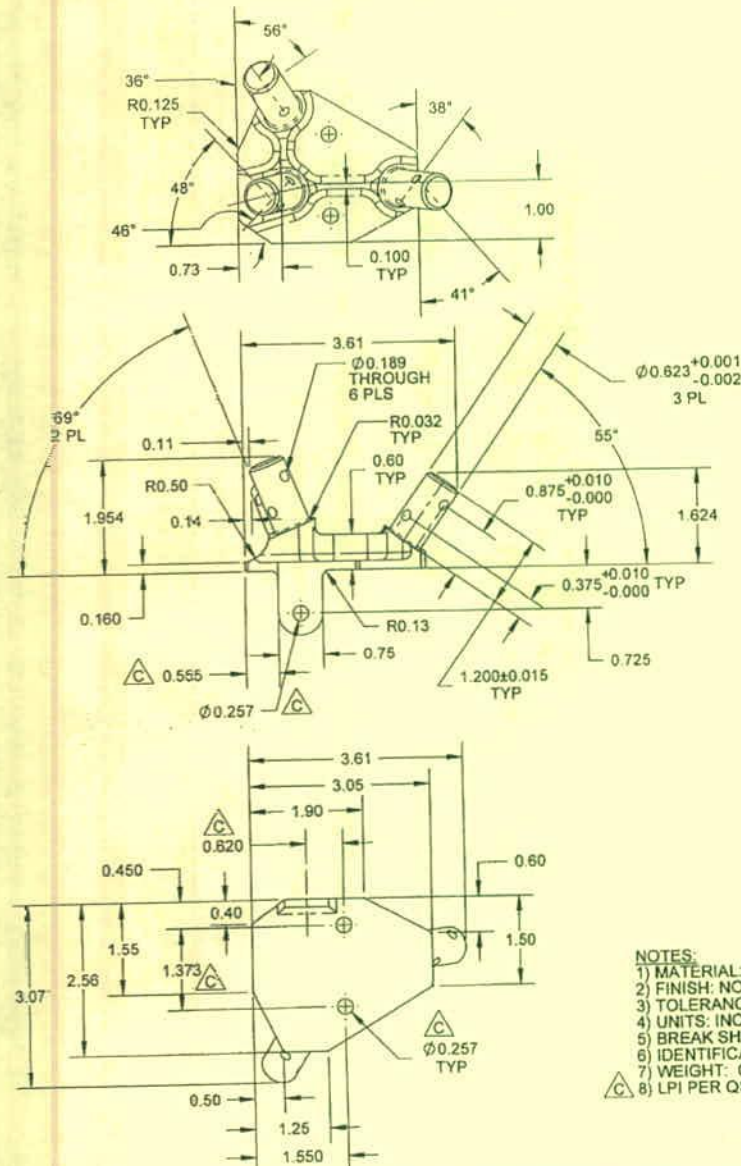
No

D3687-1P

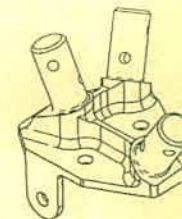
MOUNT

**

Handwritten signature and date 04/12/12



SHOP COPY
RETURNED
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 83609 MCT
12/04/20

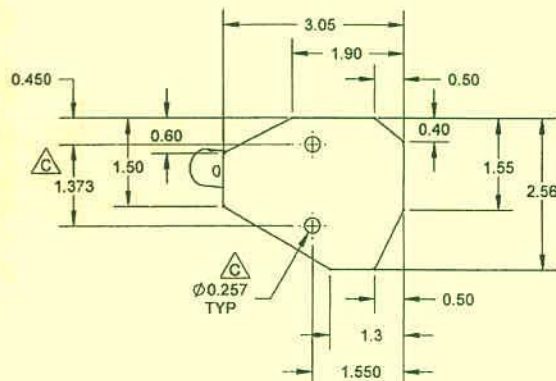
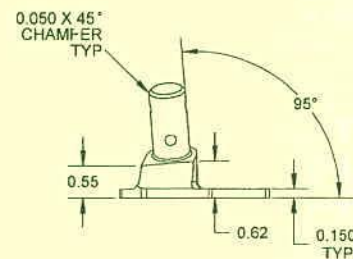
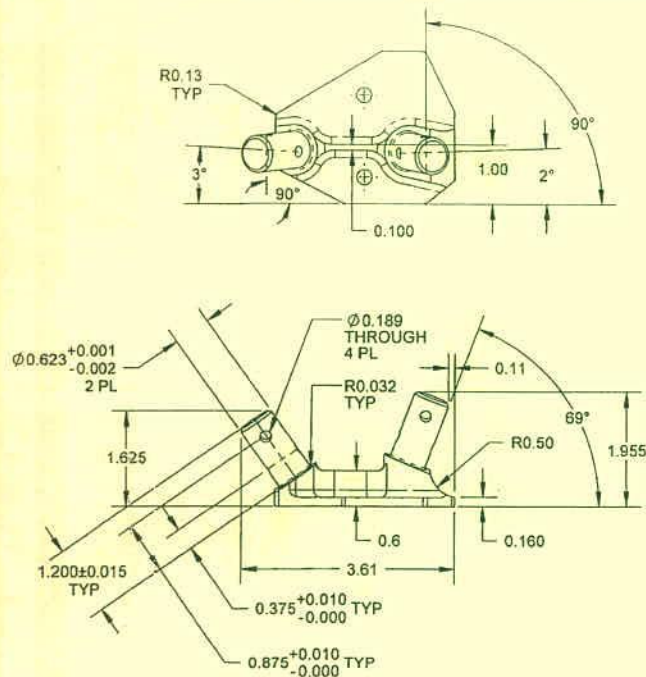


D3687-1 MOUNT

- NOTES:
1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.81 lb
8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

RELEASED
2009-08-22
MM

C	0.555 WAS 0.50 (ZN B8-1); 1.373 WAS 1.375 (ZN A8-1, A8-2); ADD 0.820 (ZN B7-1) PER NCR09-084; UPDATE NOTE 8 TO REF QSI (ZN A8-1, B3-2); 0.257 WAS 0.250 (ZN A8-1, B7-1, B7-2)	RF	09.08.26
B	CHANGE TO 17-4PH H-900 (ZN A8-1 & B3-2); R0.032 WAS R0.015 (ZN C7-1 & C7-2); REFORMATTED TO CURRENT DWG STANDARDS	RF	08.11.24
A	NEW ISSUE	RF	08.03.12
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKSSURY, ONTARIO, CANADA DRAWING NO. D3687 SHEET 1 OF 2 TITLE MOUNT COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT NOT BE LOANED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD	
DRAWN	RF		
CHECKED	97		
MFG. APPR.	21		
APPROVED	149		
DE APPR.	149		
DATE	09.08.26		



D3687-3 MOUNT

NOTES:

- 1) MATERIAL: 17-4PH SS BAR PER AMS 5643, H-900 CONDITION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.64 lb
- 8) LPI PER QSI 038 4.1.1 (ASTM E1417 LEVEL 2)

RELEASED
2009-08-22

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV.
MFG. APPR.	RF	D3687	SHEET 2 OF 2
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	MOUNT	NTS
DATE	09.08.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



2228 Gladwin Cres.
Ottawa, Ontario
K1B 4S6

Telephone (613) 899-2405
Fax (613) 226-1719

Certificate of Compliance

To:
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury Ont.
K6A 1K7

Po Number	Part Number	Quantities
16829	D3687-1P	1
16829	D3687-3P	4

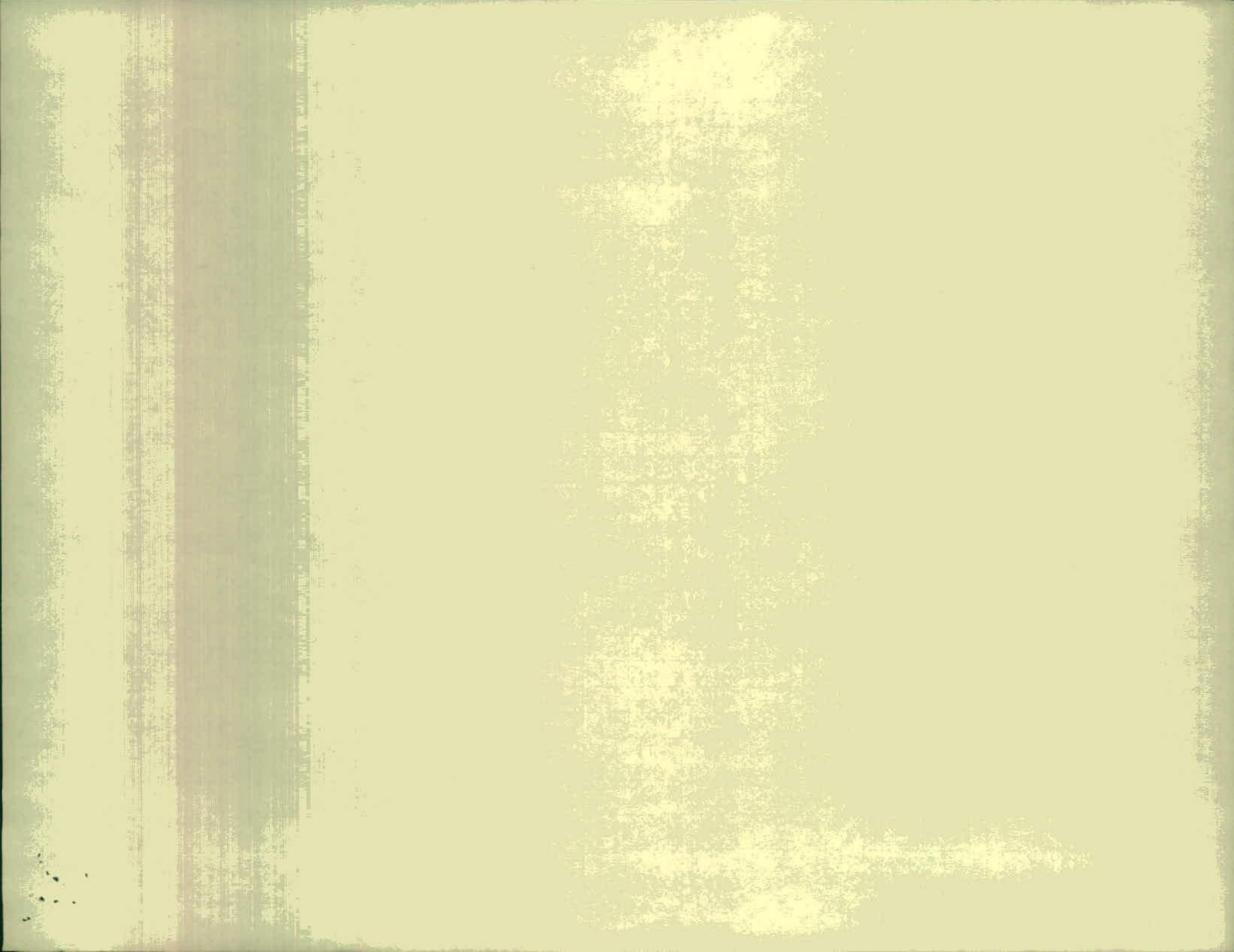
It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 16829 issued by Dart Aerospace Inc.

A handwritten signature in black ink, appearing to read "Alex Mazerolle", is written over a horizontal line.

Alex Mazerolle
President
Archer Precision Inc.
1393 Major Road,
Orleans Ontario
K1E 1H3

Inspection Report

Part		QTY	DWG #		REV.	Part Name		Date	Lot#	Job #
Dart Aerospace		10 of 10	D3687		C	Mount		ASAP		514-1/603
Inspection Interval		Special Notes								
3. Dim	Tolerance	Operator	QA First Off		QA Final					
		First Off	A	R	A	R	2	3	4	5
Rev	C	/	/		/					
IAT	17-4PH	/	/		/					
UB	None	/	/		/					
Deburr	Yes	/	/		/					
.73	±.010	.734	/		/					
46°	±1/2°	PP	/		/					
48°	±1/2°	PP	/		/					
.125	±.010	.126	/		/					
36°	±1/2°	PP	/		/					
56°	±1/2°	PP	/		/					
38°	±1/2°	PP	/		/					
1.00	±.030	1.004	/		/					
41°	±1/2°	PP	/		/					
.1100	±.010	.099	/		/					
.1160	±.010	.160	/		/					
1.954	±.010	1.953	/		/					
0.14	±.030	PP	/		/					
0.50	±.030	PP	/		/					
69°	±1/2°	PP	/		/					
0.11	±.030	PP	/		/					
3.61	±.030	PP	/		/					
0.189	+ .005/- .001	.1885	/		/					
6PL	-	/	/		/					
0.032	±.010	/	/		/					
0.60	±.030	.579	/		/					



[illegible]



skyservice
Air travel. Evolved.

NDT Work Order

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: YYZ

70254

Customer:

DART AEROSPACE

Dept: NDTYYZ

Reference:

P022148

Make:

Model:

Reg:

A/C S/N:

TSN:

CSN:

TSO:

Tail#:

SW

Task: ☐ Scheduled ☐ Unscheduled ☐ A.O.G. ☒ X.P.T. ☐ M.T. ☐ E.T. ☐ U.T. ☐ R.T.

Work Required:

CARRY OUT NDT ON THE FOLLOWING ITEMS:

- ① MOUNT ID D3687-3, WO 83611 QTY-4
- ② MOUNT ID D3687-1, WO 81748 QTY-4
- ③ MOUNT ID D3687-1, WO 83609 QTY-1
- ④ CROSSTUBE ID D412-664-105, WO'S 101997, 101996, 101998
- ⑤ CROSSTUBE ID D412-664-209, WO'S 101749, 109058, 109059

Action Taken:

Date:

Initial/Stamp:

LIQUID PENETRANT INSPECTION CARRIED
OUT ON ALL 15 ITEMS LISTED ABOVE

21 NOV 2013



NO CRACKS FOUND

PENETRANT - ARDROX 97DP25E BATCH TPO10484

BLACK LIGHT M20189

I certified that the maintenance described above has been performed with the applicable standard of airworthiness.

Signature:

Name:

GARY SMITH

ACA/SCA Stamp



Date:

21 NOV 2013

